

the Saturn V. With the configuration shown on the bottom, made up by three nuclear propulsion modules in what you might call the first stage, and a single nuclear propulsion module for both the second and third stages, we could send an expedition of 10 people to the planet Mars, land on the Martian surface, and bring them back. The first stage would drive the expedition from Earth departure orbit into a Martian trajectory, the second stage would deboost us into a Martian orbit, and the third stage would drive us, after completion of the Mars surface mission, from the Martian orbit back to Earth. The landing on the Martian surface and return to Martian orbit would be done with a separate chemical vehicle something like the Apollo lunar module.

Other possible applications of nuclear-powered modules shown on the chart would be for lunar logistics, direct ascent to the Moon, and a manned flyby of Mars.

Based on our own assessment, I am convinced that the feasibility and high-performance potential of nuclear rocket propulsion has been thoroughly demonstrated in the extensive series of successful reactor and breadboard engine system tests which have already been conducted in the Nevada desert at the Nuclear Propulsion Test Station at Jackass Flats.

I am convinced that nuclear propulsion is a must for our future space needs. And in view of the very long leadtimes this program requires, it would be most advisable that funding be made available in fiscal year 68 to continue development work on the critical engine and reactor phases of the program.

If we are willing to make this investment today, we should be able to be on the planet Mars, with man, in less than 20 years from now.

Mr. TEAGUE. I hope I'm here, Wernher. I'll find out if you're right or not. Thank you very much, gentlemen, we appreciate it.

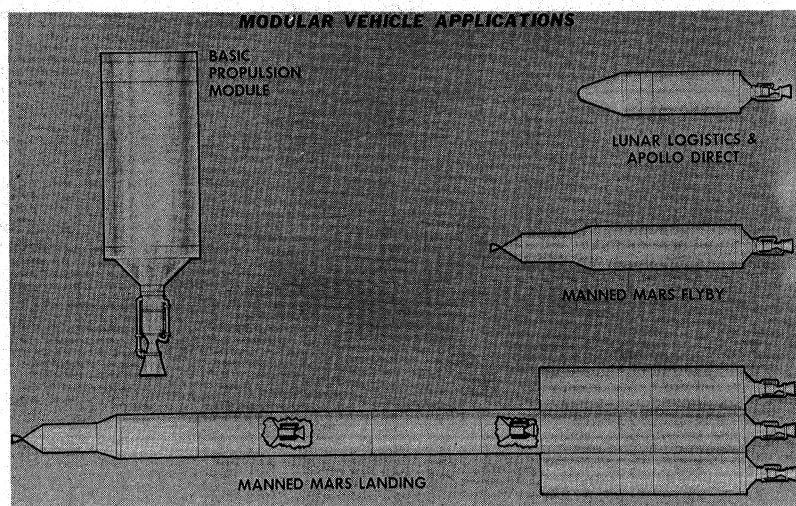


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